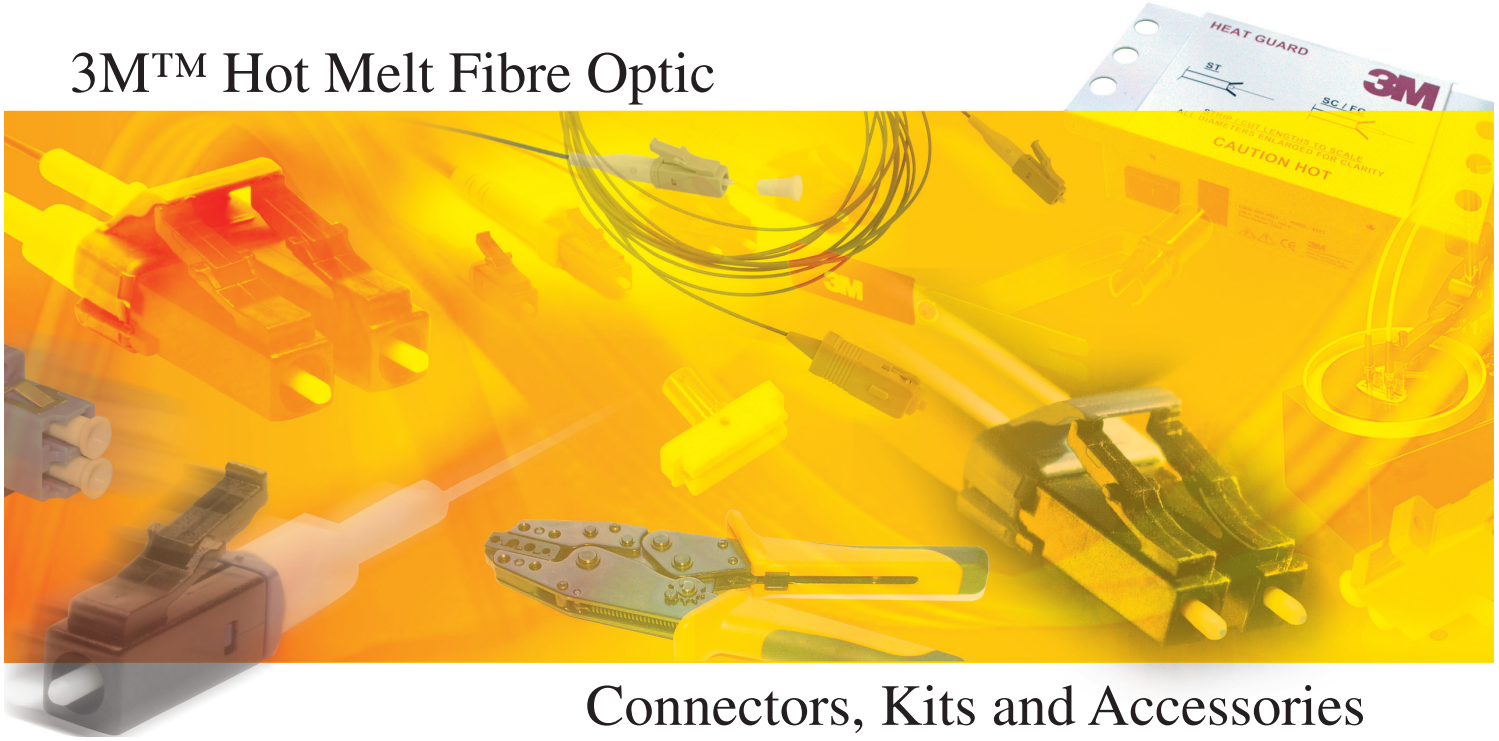
**3M Telecommunications**

*Solutions for Networks*

# 3M™ Hot Melt Fibre Optic




## Connectors, Kits and Accessories

3M *Innovation*

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3M™ Hot Melt Connectors are among the most popular with contractors because of their reliability and ease of use. They come pre-loaded with an adhesive that is not limited in shelf life, and the termination procedure provides the ability to reheat and reposition the fibre in the termination process. This easy-to-install field mount connector provides reliable performance in indoor and outdoor applications and has no internal splice.

All 3M™ Hot Melt connectors can be terminated using the same 3M™ Hot Melt Termination Kit 6365/6361. 3M™ LC Connectors require the 3M™ LC Expansion Kit 6650-LC which includes a weighted polishing jig to provide a PC centred apex end face.

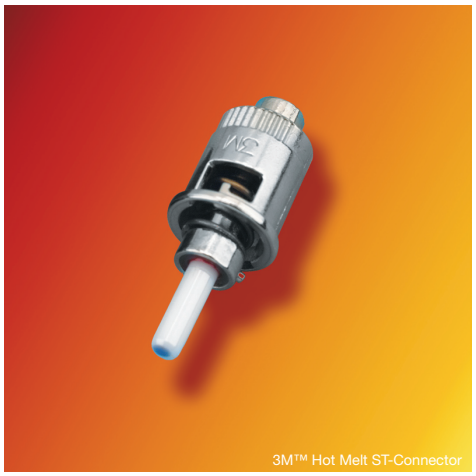
3M™ Hot Melt LC-Duplex Connector

## APPLICATIONS:

The applications for the hot melt connector are based on industry standards for performance over environmental extremes.

**3M™ HOT MELT CONNECTORS**

- Singlemode and multimode local area networks and campus wiring
- Singlemode telephony central office and CATV headend
- Environmental performance requirements exceeding ISO 11801, EN 50173 and EIA/TIA 568-B.3
- Singlemode reflection requirements of –55dB
- Available in LC, ST, SC, FC singlemode and multimode connectors
- Provides reliable performance in a wide range of indoor and outdoor applications


3M™ Hot Melt ST-Connector

3M™ Hot Melt SC-Connetor

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## FEATURES AND BENEFITS

| 3M™ HOT MELT CONNECTORS – LC, ST, SC, FC | |
|---|---|
| Meets ISO 11801, EN 50173 and EIA/TIA 568-B.3 standards for indoor and outdoor applications | Long term reliability |
| Ease of use on backbone and horizontal cable | Quick termination in <2 minutes; high yield |
| Allows custom length cable assemblies to be built on site | Enhances cable management in telecom room or central office |
| | Minimizes cable slack |
| Adhesive fibre retention | Not dependent on mechanical retention alone |
| 3M field polishing process produces <55dB reflection, singlemode | Reliable in high speed transmission |
| Pre-loaded adhesive | No epoxy mixing or mess; no shelf life |
| Re-heatable adhesive | Allows fibre repositioning |
| Blue dot of adhesive | Easy to see when polishing is complete |

## FEATURES AND BENEFITS

| SPECIFICATIONS | MULTIMODE | SINGLEMODE |
|---|---|---|
| **Product Number** | 6100 ST Series<br>6200 FC Series<br>6300 SC Series<br>6600 LC Series | 8100 ST Series<br>8200 FC Series<br>8300 SC Series<br>8600 LC Series |
| **Testing Specification** | ISO 11801, EN 50173 and EIA/TIA 568-B.3 | |
| **Operating Temperature*** | -10°C to +60°C | |
| **Attenuation**** | <0.2dB typical | |
| **Reflection***** | -25dB typical | -55dB typical |
| **Mating Durability 300 Matings** | <0.2dB change | |
| **Storage Temperature** | -40°C to +85°C | |
| **Materials and Identification** | | |
| **Ferrule** | Zirconia ceramic | |
| **Housing Body** | Nickel plated zinc (ST)<br>Engineered resin (LC, SC, FC) | |
| **Boot** | Thermoplastic elastomer | |
| **Flame Retardancy** | UL-94 V-0 | |
| **Adhesive** | Blue dot on ferrule | |

*Multimode connectors tested at 850nm and 1300nm.
**Singlemode connectors tested at 1310nm and 1550nm.
***Tested for 96 hours at 85°C, exceeding IEC standards.

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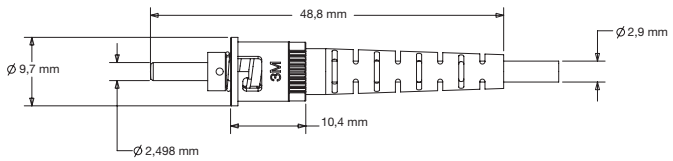
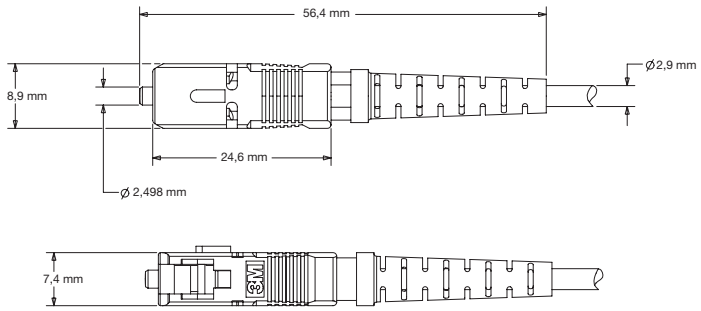
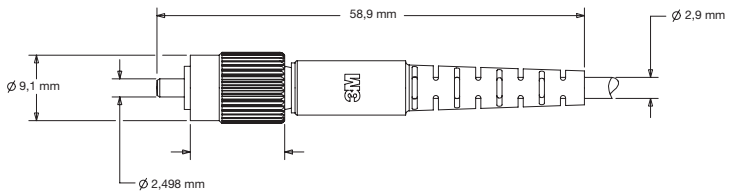
## 3M™ ST Hot Melt Connector



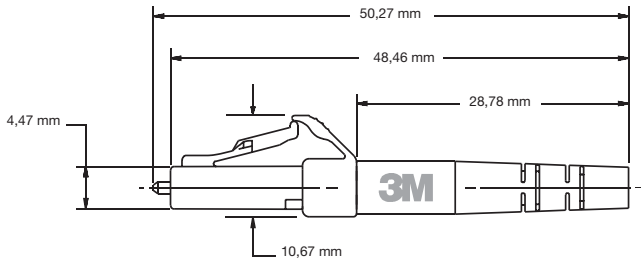

## 3M™ SC Hot Melt Connector



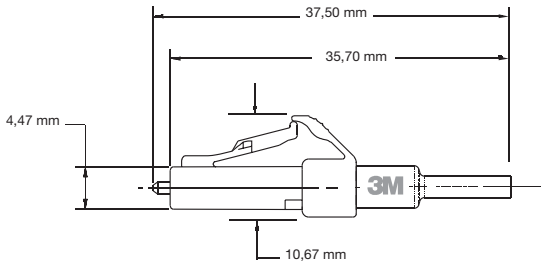

## 3M™ FC Hot Melt Connector



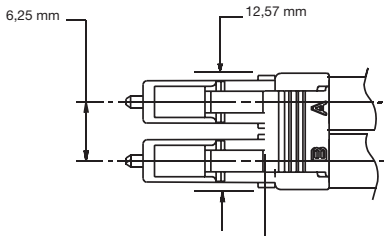

## 3M™ LC Hot Melt Connector



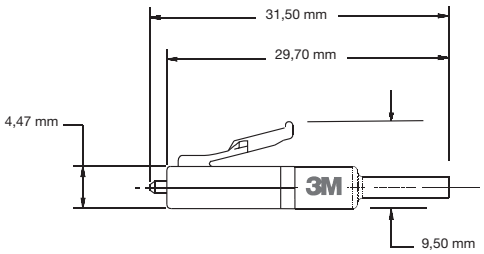

LC UNIBODY DUPLEX CONNECTOR ASSEMBLIES
WITH JACKETED CABLE BOOT




LC UNIBODY DUPLEX CONNECTOR ASSEMBLIES
WITH UNJACKETED CABLE BOOT




LC UNIBODY DUPLEX CONNECTOR ASSEMBLIES




LC BTW CONNECTOR
(BEHIND THE WALL)
UNJACKETED FIBRE AND SIMPLEX ONLY

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## ORDERING INFORMATION - 3M™ HOT MELT CONNECTORS

| PRODUCT NUMBER | DESCRIPTION | MOQ | PACKAGING |
|---|---|---|---|
| **3M™ LC Connectors** | | | |
| 6600-S | MM hot melt simplex 900 BTW, white boot | 60 | 1/bag, 60/carton |
| 6602-S | MM hot melt simplex 1.6-2.0 cable, white boot | 60 | 1/bag, 60/carton |
| 6603-S | MM hot melt simplex 2.4-3.0 cable, white boot | 60 | 1/bag, 60/carton |
| 6601-D | MM hot melt duplex 900 buffer, white/beige boots | 60 | 1/bag, 60/carton |
| 6602-D | MM hot melt duplex 1.6-2.0 cable, white/beige boots | 60 | 1/bag, 60/carton |
| 6603-D | MM hot melt duplex 2.4-3.0 cable, white/beige boots | 60 | 1/bag, 60/carton |
| 6604-D | MM hot melt duplex 900 buffer, red/black boots | 60 | 1/bag, 60/carton |
| 6605-D | MM hot melt duplex 1.6-2.0 cable, red/black boots | 60 | 1/bag, 60/carton |
| 6606-D | MM hot melt duplex 2.4-3.0 cable, red/black boots | 60 | 1/bag, 60/carton |
| 8600-S | SM hot melt simplex 900 BTW, white boot | 60 | 1/bag, 60/carton |
| 8602-S | SM hot melt simplex 1.6-2.0 cable, white boot | 60 | 1/bag, 60/carton |
| 8603-S | SM hot melt simplex 2.4-3.0 cable, white boot | 60 | 1/bag, 60/carton |
| 8601-D | SM hot melt duplex 900 buffer, white/beige boots | 60 | 1/bag, 60/carton |
| 8602-D | SM hot melt duplex 1.6-2.0 cable, white/beige boots | 60 | 1/bag, 60/carton |
| 8603-D | SM hot melt duplex 2.4-3.0 cable, white/beige boots | 60 | 1/bag, 60/carton |
| **3M™ ST Connectors** | | | |
| 6100-W | MM hot melt connector, white boot | 60 | 1/bag, 60/carton |
| 6100-B | MM hot melt connector, black boot | 60 | 1/bag, 60/carton |
| 6100-R | MM hot melt connector, red boot | 60 | 1/bag, 60/carton |
| 6100-W1K-S | MM hot melt connector, white boot | 1,000 | 1/bag, 1,000/carton |
| 6100-B1K-S | MM hot melt connector, black boot | 1,000 | 1/bag, 1,000/carton |
| 6100-R1K-S | MM hot melt connector, red boot | 1,000 | 1/bag, 1,000/carton |
| 8100-YS | SM hot melt connector, yellow boot | 60 | 1/bag, 60/carton |
| 8100-Y1K-S | SM hot melt connector, yellow boot | 1,000 | 1/bag, 1,000/carton |
| **3M™ FC Connectors** | | | |
| 6200 | MM hot melt connector, white boot | 60 | 1/bag, 60/carton |
| 8200-W | SM hot melt connector, white boot | 60 | 1/bag, 60/carton |
| **3M™ SC Connectors** | | | |
| 6300-W | MM hot melt connector, white boot | 60 | 1/bag, 60/carton |
| 6300-W1K-S | MM hot melt connector, white boot | 1,000 | 1/bag, 1,000/carton |
| 6300-B1K | MM hot melt connector, black boot | 1,000 | 1/bag, 1,000/carton |
| 6300-R1K-S | MM hot melt connector, red boot | 1,000 | 1/bag, 1,000/carton |
| 8300 | SM hot melt connector, white boot | 60 | 1/bag, 60/carton |
| 8300-W1K-S | SM hot melt connector, white boot | 1,000 | 1/bag, 1,000/carton |

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## 3M™ HOT MELT TERMINATION KITS

The 3M™ Hot Melt Termination Kits 6365 (120V oven) and 6361 (230V oven) contain all materials necessary to terminate 3M SC, ST, and FC hot melt, both singlemode and multimode. An LC expansion kit 6650-LC makes it easy to incorporate the LC Hot Melt process into one kit.

3M™ Hot Melt Termination Kits 6365 and 6361

## FEATURES AND BENEFITS

| | |
|---|---|
| Improved microscope with oblique and coaxial lighting | Better view of fibre end face inspection |
| Roll-up tool pouch | Tools are organized and accessible |
| Universal hot melt holders | Fewer parts to carry, holds cable more securely |
| Instruction CD | Organized into video segments |

## ORDERING INFORMATION - HOT MELT TERMINATION KITS

| PRODUCT NUMBER | DESCRIPTION | MOQ | PACKAGING |
|---|---|---|---|
| 6365 | Hot melt termination kit for ST, FC, SC hot melt connectors, 120V | 1 | 1 each |
| 6361 | Hot melt termination kit for ST, FC, SC hot melt connectors, 230V | 1 | 1 each |
| 6650-LC | LC expansion kit | 1 | 1 each |
| 6156 | Conversion kit (epoxy to hot melt 120V) | 1 | 1 each |
| 6157 | Conversion kit (epoxy to hot melt 230V) | 1 | 1 each |

## ORDERING INFORMATION - HOT MELT ACCESSORIES

| PRODUCT NUMBER | DESCRIPTION | MOQ | PACKAGING |
|---|---|---|---|
| 6851-E | Autopolisher for ST,SC and FC Hot Melt connectors | 1 | 1 kit |
| 6192-B | Lapping film for 6851-E Autopolisher | 4 pkg | 50 shts/pkg |
| 6365-CC | Hot melt consumable kit for ST, SC, FC<br>Lapping film, 2 µm (254X)<br>Lapping film, 0.05 µm (263X)<br>Lint free cloths<br>8892 universal polishing jig | 1 | 1 each<br>200 sheets<br>50 sheets<br>200 sheets<br>1 each |
| 6650-LS | Lapping film singlemode consumable kit (polishes 400 connectors)<br>Lapping film, 9 µm (441X)<br>Lapping film, 2 µm (254X)<br>Lapping film, 0.5 µm (661X)<br>Lapping film, final polish (863XW) | | 1 each<br>20 sheets<br>100 sheets<br>40 sheets<br>1 each |
| 6650-LM | Lapping film multimode consumable kit (polishes 400 connectors)<br>Lapping film, 9 µm (441X)<br>Lapping film, 2 µm (254X) | 1 | 1 each |

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## 3M™ HOT MELT TERMINATION KITS 6365/6361 CONTENTS

| PRODUCT NUMBER | DESCRIPTION | CONTENTS QTY | REPLACEMENT MOQ | PACKAGING |
|---|---|---|---|---|
| 6312 | 120V oven (6365 Kit) | 1 | 1 | 1 |
| 6323 | 230V oven (6361 Kit) | 1 | 1 | 1 |
| 6365-UH | Universal holder | 4 | 4 | 4/pkg |
| 6365-PP | Round polishing pad | 1 | 1 | 1 |
| 8365-PP | Soft polishing pad | 2 | 1 | 1 |
| 6192-A | 2 µm lapping film (pale green) | 200 | 500 | 500/pkg |
| 661X-1.5S | 1.5 µm diamond film (pale grey) | 15 | 15 | 250/pkg |
| 863X-0.02S | Final lapping film (frosted) | 50 | 50 | 50/pkg |
| 263X | 0.05 µm lapping film (pale yellow) | 50 | 50 | 50/pkg |
| 8892 | Polishing jig | 3 | 1 | 1 |
| 6365-JS | Jacket stripper | 1 | 1 | 1 |
| 6365-KS | Kevlar snips | 1 | 1 | 1 |
| 6365-ST | Stripping tool | 1 | 1 | 1 |
| 6365-CT | Crimp tool | 1 | 1 | 1 |
| 6365-FS | Fibre scribe | 1 | 1 | 1 |
| 6365-VS | View scope (200X) | 1 | 1 | 1 |
| | Pronto adhesive | 1 | - | - |
| 05-00017 | Lint-free cloths | 100 | 100 | 100/pkg |
| | 120V power cord (6365 Kit) | 1 | - | - |
| | 230V UK power cord (6361 Kit) | 1 | - | - |
| | 230V EU power cord (6361 Kit) | 1 | - | - |
| | Alcohol bottle (empty) | 1 | - | - |
| | Water bottle (empty) | 1 | - | - |
| | Fibre scrap can | 1 | - | - |
| | Roll up pouch | 1 | - | - |
| | Fibre marking pen | 1 | - | - |
| | Training CD ROM | 1 | - | - |
| | Instructions (paper) | 1 | - | - |

The 3M™ LC Expansion Kit 6650-LC is used in addition to the 6365/6361 hot melt termination kits. The LC expansion kit contains the tools needed to terminate 3M™ LC Hot Melt Connectors that are not included in the 6365/6361 termination kits.

## 3M™ LC HOT MELT EXPANSION KIT 6650 CONTENTS

| PRODUCT NUMBER | DESCRIPTION | CONTENTS QTY | REPLACEMENT MOQ | PACKAGING |
|---|---|---|---|---|
| 6650-LH | Hot melt connector holder | 4 | 4 | 4/pkg |
| 6650-JW | Polishing jig w/ weight (includes 2 jigs) | 1 | 1 | 1 |
| 6650-LS | Replacement polishing jigs | 0 | 2 | 1 |
| 6650-LT | Crimp tool | 1 | 1 | 1 |
| 6650-VS | Adapter for view scope | 1 | 1 | 1 |
| 6650-HS | Heat shrink fixture | 1 | 1 | 1 |
| 6650-HC | Holder cleaning pin | 3 | 3 | 3/pkg |
| 6650-LP | Polishing pad 4.5 x 5.5 | 2 | 2 | 2/pkg |
| | Instruction manual | 1 | - | - |
| | Lapping film, start-up kit* | 1 | - | - |
| | Laminated stripping template | 1 | - | - |

*up to 100 total polished multimode ends, or up to 50 singlemode ends with 50 multimode ends

A complete line of ST, FC, SC and LC couplings is available.
For more information, please contact your local sales representative.

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important

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